

## EXTERNAL SHOCKS AND MACROECONOMIC PERFORMANCES IN AFRICA

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### ABSTRACT

*This study examined external shocks and macroeconomic performance in Africa. Specifically, the study examined the impact of global oil price shocks on GDP and analyzed the impact of world commodity price shock on fixed capital formation in Africa countries. The study sampled 20 Africa countries, over the period spanning from 1980 to 2018. Data were collected from the World Banks database and international monetary fund database. Panel unit root analysis, Panel SVAR estimation, impulse response estimation and variance decomposition estimation were the estimating techniques used to achieve all the objectives of the study. This study found out that global oil price shock has positive impact on the gross domestic product of Africa countries and that innovative shock to world commodity price index has positive impact on fixed capital formation of African countries sampled in the study though the impact tends to decline over time. The study recommends that government across Africa continent should maintain an effective investment and interest rate policy that can curtail the possibility of excessive effect of shock from world commodity price index on the level of existing and/or prospective fixed capital formation*

**KEYWORDS:** External Shocks, Macroeconomic performance & World crude oil price

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### 1. INTRODUCTION

Developing countries (African Countries inclusive) have become more integrated into the global economy through the globalization process, (Keegan and Chisha 2008). Based on this, the sizes, volume of trade and private financial flows across countries have increased drastically (WTO, 2014). In particular, African trade volume has stepped up from \$148.59 billion in 2000 to US \$265.61 billion in 2014. Also, the size of financial flows to Africa increased to US \$46.07 billion from US \$6.73 billion over the same period. The increase in the volume of trade has really assisted emerging and developing economies to access larger markets for their products with larger capital inflow, help economies to bridge the gap between their savings and investment finance requirements. However, the outcome of this commercial and financial linkage is also the susceptibility of these countries especially African Countries to adverse external shocks. Furthermore, African countries mostly rely on the volatile prices of their primary products exports and aid flow (Raddatz, 2002).

Therefore, understanding the trend of macroeconomic fluctuations, especially in African countries requires a good grasp of the impact of external shocks, (Kose and Riezman, 2001). The sources of such shocks may include fluctuations in the prices of exported primary products, imported capital goods, intermediate inputs and financial shocks especially the world interest rate. Also, some of the African countries are net oil exporters that depend mostly on proceeds from the sales of crude oil to generate foreign earnings to finance their imports. At the same time, they depend on importation of capital and consumable goods from advanced and emerging economies

of the world to cater for industrial and household needs, with this, their economic fortunes are inextricably tied to global economic activities, thus making them vulnerable to external shocks (Oyelami and Olomola, 2016).

African countries like other developing countries are faced with the challenge of sustaining their economic growth for poverty reduction. However, external shocks especially adverse ones make achieving sustainable growth a big challenge. Despite the perceived significant impact of external shocks in the long-run growth and economic stability, the existing theoretical and empirical literature offers little guidance in regard to its impact on key macroeconomic variables including long-run growth in developing countries. The theoretical literature is mainly tailored to advance countries with highly developed institutions and market (Schnabl, 2009, Rose, 2000, Frankel & Rose, 2002).

In the last two decades, the world economies have been witnessing major external shocks, originated from imbalanced demand and failed financial markets. Commodity price shocks, accompanied by the great financial crisis have been rippling across the international economies. The uncertain impacts of such external shocks on the world economy particularly African countries have caused great anxiety to economic policy makers in African countries. This concern therefore also causes interest in understanding the relationship between external shocks and macroeconomic performances which occurs majorly between trade and economic growth. Africa as a continent consists of 54 countries, 12 are major crude oil exporters to the world, with an average of about 7 million barrels per day (Muse & Uche, 2018). The fluctuations in crude oil price at international oil market always threaten the attainment of macroeconomic policy objectives, particularly in non-oil exporting African countries. The volatility of the world oil price constitutes a serious form of challenge to the attainment of macroeconomic policy objectives in African countries and even others, who often rely on the sales of crude oil for the implementation of both annual budgets and development programmes.

World Bank African region (2018) reported that the plunge in commodity prices-particularly oil, which fell by 67percent between June 2014 and December 2015 affected their drive for development. After fixing a certain amount (often in dollars) as benchmark for their annual budgets and development plans, the oil price shock, often, reduce foreign exchange earnings and shrink money supply thereby impeding the implementation of their annual budgets and development programmes, because they are heavily dependent on the sales to fund it, hence this account for the huge infrastructural deficit and inability to achieve sustainable growth in African countries. Even with different macroeconomic policies put in place to cushion the effects of the shock, yet the objectives of developing their economies through the attainment of macroeconomic policy objectives are often impeded greatly by this situation. This situation is one major reason, why growth and development in African countries has been a little bit slow.

While it may be difficult to contest the fact that oil price change and its volatility is the most important source of shock to the African economy, it is also difficult to ascribe all macroeconomic fluctuation to oil price shocks. Based on this, it is pertinent to take into consideration the implication of monetary and fiscal policy shocks of important trading partners, especially developed and emerging economies in any serious discussion of external shocks in African Countries. Therefore, it is essential to study other sources of shocks via oil price and world commodity price shocks within the global interdependent framework and more importantly to determine the relative contribution of external and internal shocks to macroeconomic performances in African countries and that is what this study seeks to achieve.

The objective of the study is to examine the impact of global oil price shocks on gross domestic product and determine the impact of world commodity price shock on fixed capital formation in Africa countries. The study made use of panel data to examine the impact of external shocks on macroeconomic performances, which covers 1982 to 2017. The

rest of the paper is structured thus; is followed by section two which discusses the literature review which contains both the theoretical issues and empirical literature. The third part contains the model specification, after which is Result and discussion, before summary and conclusion

## 2. LITERATURE REVIEW

Shock is an event that triggers decline in well-being, which can affect individuals (illness, death), a community, region or even a nation (natural disaster, economic crisis). (World Bank, 2000). Greg (2013) defined economic shock as an event that can cause a sudden, drastic change in an economy, which can either originate from outside or within an economy. Macroeconomic performances refer to an assessment of how well a country is doing in reaching key objectives of government policy with the aim of improving real standard of living for their population. According to Geoff (2010), macroeconomic performance refers to an assessment of how well a country is doing in reaching key objectives of government policy. He went further in his assertion that the major aim of the policy is improvement in real standard of living and that macroeconomic performance covers a wide range of indicators like real GDP growth, Prices as measured by annual changes in consumer price index, Trade balances and measures of competitiveness, Productivity of labour and capita inputs, quality and accessibility of public services, average standard of living as measured by per capita GDP(PPP adjusted), Jobs (employment and unemployment rates) and fixed capital formation (FCF).

## 3. THEORETICAL LITERATURE

### 3.1 Hicks Theory of Trade Cycle

This theory was developed by Hicks in 1950, he combined the principles of acceleration and multiplier, the theory of acceleration and multiplier are the two side's theory of fluctuations, just as the theory of demand and supply, which form the two sides of the theory of value. He explained further by using Keynes' multiplier analysis, Clark's acceleration analysis and Harrod's growth analysis. The concept of induced, autonomous investment and warranted rate of growth play an important role. Autonomous investment is independent of changes in output or income. It is not related to the growth of the economy. Hicks assumes that autonomous investment increases at a regular rate so that it remains in equilibrium if it were not disturbed by external forces, but in the real sense of it, shocks from both within and outside a particular country, sub-region or continent can actually disturb the pace of investment growth. Induced investment, on the other hand, is that investment which depends on the changes in the level of output or income. Thus it is a function of the growth rate of the economy.

It is important to note that income and price stability are part of the objectives of monetary policy which is the focus of this study. The warranted growth rate is that rate of growth which will maintain itself, when saving and investment are in equilibrium. According to Hicks, the economy is said to be growing at a rate when real investment is equal to real saving. It is the interaction of the multiplier and the accelerator which causes fluctuations around the warranted rate of growth. The theory assumes the values of multiplier and accelerator as constant. It is only the multiplier that remains active throughout all the phases of the cycle and the accelerator on the other hand, remains passive during the depression phase. Thus the upswing is the result of the combined action of both the multiplier and accelerator, whereas down-swing is a product of multiplier only. He explained the process of cyclical fluctuations using the interaction of accelerator and multiplier, which he termed "leverage effect" or "the super multiplier" which also causes fluctuations in the economy.

He believed that an expansionary phase starts in the economy when there is autonomous increase in investment

due to exogenous factors like technical improvement, (synonymous with technological shock) territorial development or population changes. This will generate income due to multiplier effect, which in turn increases induced investment due to acceleration effect. Thus the full enlarged rise in income occurs as a result of autonomous investment and the combined multiplier-accelerator interaction. This process will continue to operate till the economic activity reaches the full employment “ceiling point” and the cycle will undergo a downward movement. Hicks gave the importance of monetary factors; he believed that during an upswing, if banks contract credit, the downturn will start quickly even before full employment ceiling is reached. Due to strong liquidity preference, loanable funds decline resulting in a fall of autonomous investment and steep decline in income. Thus Keynes had shown that monetary factors also can aggravate the trade cycle fluctuations, but the basic cause of trade cycle is the multiplier accelerator interaction.

As good and relevant as the theory is to this study, one will still find some gaps in the theory. One is that, relevant studies have shown that consumption function is not static, hence nullifying the assumption of constant value of multiplier. Again, technological innovations have changed the assumption of constant value of accelerator. Lastly, he believed economic growth is always due to changes in autonomous investment, but growth should come from within the economy and not from outside. What is coming from outside should only complement. The theory is relevant to this study since Hicks gave the importance of monetary factors, which according to him is useful during an upswing.

### 3.3 Empirical literature

Knut (2013) discovered that the United State economy and monetary policy respond differently to global demand shocks. On a different note, Wang, Zhu and Wu (2017) study the effects of oil price shocks on the business cycle, They found out that oil transmission mechanism is determined by the nominal inertia, income effect, and the portfolio allocation effect and both noncore inflation, monetary policy and core inflation monetary policy that are simultaneously pegged to oil prices fluctuations are inferior to the monetary policy purely pegged to core inflation. Oil price shock is just one out of the many shocks, so it is important to look at other form of shocks. Karsten and Vermeulen (2016) consider the short-term effects of competitiveness shocks on macroeconomic performances in the euro area. The result showed that competitiveness shocks help to explain subsequent GDP developments in most countries but have little explanatory power for the current account balance.

Camacho, Leiva-Leon and Perez-Quiros (2015) study the effects of contractionary (or expansionary) demand (or supply) shocks hitting the Euro-areas countries on the expectations about the ECB’s monetary policy. The results indicated that expectations are responsive to aggregate contractionary shocks but not to expansionary shocks. Fetai (2013) in his study on the effectiveness of fiscal and monetary policy during the financial crisis; he found out that, both fiscal and monetary policy contractions are associated with an increase in the output cost during the financial crisis. Furthermore, Raddatz (2008) who quantifies and compares the role of external and internal shocks as sources of macroeconomic fluctuations in a sample of 38 African countries and he finally discovered that shocks constitute a major obstacles to achieving macroeconomic objectives of all the countries. Bhattacharaya and Kar (2016) who worked on shocks, economic growth and the Indian economy, the domestic shocks are rainfall shortfall and fiscal profligacy and three external shocks are oil price hike, world trade shock and capital flow shock. Their result show that (different shocks have different impact on various aspect of the growth process) plausible rainfall and fiscal profligacy shocks have a strong growth retarding effect compared to plausible scenarios of the three external shock both in the long and short run.

Senadheera (2016), using SVAR model with block exogeneity assumption, long-run and short-run restrictions.

The result showed that domestic shocks are the primary sources of macroeconomic fluctuations in Sri Lanka. And foreign shocks also play a considerable role in explaining the variability in output growth and domestic inflation. Besides, Siami-Namini(2018) believed that oil price is one of the most important factors that have affected the world economy since the 1970s. After using factor augmented vector autoregressive (FAVAR) approach and compared the result with the Vector autoregressive (VAR) model in Iran between 1988 and 2011. The result of FAVAR is consistent with theory and better than VAR model result which showed the existence of price and liquidity puzzle while FAVAR technique did not provide any evidence of puzzle. Tweneboah and Adam (2008) used a vector error correction model to explore the long-run and short-run linkages between the world crude oil price and economic activities in Ghana, for the period 1970 to 2006. The results points out that there is a long run relationship between the variables under consideration and unexpected oil price increase is followed by an increase in price level and a decline in output in Ghana. Kutu and Ngalawa (2016) found no direct link between exchange rate, interest rate shocks and industrial output growth. After employing an eight variable structural vector auto regression (SVAR) on how monetary policy shocks affect industrial sector performances in South Africa between 1994 and 2012 using monthly data.

### **Theoretical Background**

#### **Hawtrey's Pure Monetary Theory**

The study adopts Hawtrey's Pure Monetary theory, the novel feature of this model is that it is purely a monetary phenomenon and that fluctuations occur in the flow of monetary demand on the part of business that leads to prosperity and depression (instability/shocks) in the economies of different countries. Hawtrey who is the main proponent of this theory believed that non-monetary factors like strikes, floods, earthquakes, drought, wars etc. may at least cause partial depression and not general depression i.e. symmetric and asymmetric shocks. A feature which makes the model appropriate and relevant for this research work, as this will enable the study to examine empirically the long run relationship between macroeconomic shocks and monetary policy in sub-Saharan African countries. The change in the flow of money in an economy is usually caused by fluctuations in the level of economic activities. Thus, this theory posits that the business cycle is caused due to the fluctuations in the monetary and credit markets which will induce changes in both interest and exchange rate. The fluctuations in the supply of money and the bank credit are the main causal factor of a cyclical process, with an increased supply of money, prices rise, profit increases, total output increases (GDP) and thus overall growth takes place. But, if the money supply decreases then price will fall, profits decline, total output equally falls as production activities become sluggish and the economy enters into the depression phase.

Furthermore, Hawtrey believed that the principle factor behind money supply is the credit created by the banking system. The economy observes the upswing with the expansion of banks credit and continues to expand the credit facilities because the situation is such that they find it profitable to offer the credit at a relatively lower interest rate and this induces the Entrepreneurs to undertake productive activities and avail the benefit of bank credits. As long as the process of credit expansion continues, the general level of price increases as after a certain limit, the rate of increase in the demand will be more than the supply rate. The supply increases at a lower rate because of limited production capacity and the gestation period of new investments. Thus, expansion of credit helps in accelerating the economy and at the same time helps in price rise; the economy observes the upswing and enters into the expansion phase. In conclusion, one cannot argue the fact that credit creation by banks helps to increase money supply, but I think it will be wrong to assume away other important factors aside credit creation, during election in all African countries, money supply always rise and at post-harvest periods.

The two scenarios above are often referred to as both demand and supply shocks.

Hawtrey's monetary theory can be critiqued on the ground that, Traders do depend only on bank credit, previous saving, profit, trade credits are other sources available to them. Believing trade cycle is purely a monetary phenomenon may be wrong, since technology shocks, capital stock, multiplier accelerator interaction are non-monetary factors which can equally determine trade cycle and finally, Hawtrey's believe that Traders do not react to changes in interest rate may be wrong. Traders will react to changes in interest rate if it is reduction on a permanent basis and interest rate is not the only basis why Traders accumulate stock, price changes, cost of storage and business expectations also count. In conclusion, fluctuations as described by Hawtrey proxy shocks and interest rate as monetary phenomenon, is one of the variables of monetary policy, hence, the relevance of the theory.

### Model Specification

This study estimated the impact of global oil shocks on gross domestic product and analyzed the impact of world commodity price shocks on fixed capital formation. The objectives of the study will be achieved using different estimating techniques as applicable. Descriptive analysis, panel unit root test, panel structural VAR and Impulse response, based on the work of Mathew and Harold (2009) who assessed oil price shocks and economic performance in Africa's oil exporting countries and represented their model with three equations.

$$\phi_{it} = Ci + \lambda(L) \phi_{it} + G(L) \Theta_t + \mu_{it}$$

where  $\phi_{it}$  and  $\Theta_t$  are (nx1) vectors of variables given by

$$\phi_{it} = (gdp, une, exr, inf, ms, int) \text{ and } \Theta_t = (op)$$

*dgp* = gross domestic product, *une*=unemployment, *exr*= exchange rate, *inf*= inflation, *ms*=money supply and *int* = interest rate

The model is hereby modified to suit the purpose of this study.

$$GDP = f(WCOP, WI, WRIR, WCPS,) \quad (i)$$

$$FCF = f(WCPS, WI, WRIR, WCOP,) \quad (ii)$$

Where GDP stands for Gross domestic product, FCF means fixed capital formation and ER means exchange rate. Other variables are WI= World inflation, WCOP= World crude oil price volatility and WRIR= World real interest rate and WCPS = World commodity price volatility.

Based on the model on macroeconomic performances and external shocks on African countries, Panel SVAR model will be employed in this study to achieve objective 1, this is because, this approach will enable us to investigate the possibility of both transitory and permanent effects of these shocks variables on monetary performances on African countries.

## 4. RESULTS AND DISCUSSIONS

The results of the study are presented as follows;

### Panel Unit root Analysis

**Table 1: Panel Unit Root Test Result**

Variables	Test At Level			Test At First Difference			Remarks
	Llc	Ips	Bt	Llc	Ips	Bt	
GDP	3.51492	8.31207	4.84983	-4.74061*	-7.31391*	-4.21882*	I(1)
FCF	-3.09100*	-3.24299*	-1.89647*	-13.7973*	-16.3824*	-14.5506*	I(0)
WCOP	-0.69871	0.79877	-3.14172*	-5.73974*	-14.2098*	-3.10554*	I(1)
WI	-5.58016*	-4.71811*	-6.26162*	-9.14491*	-21.2420*	-15.2196*	I(0)
WRIR	-16.9049*	-15.6401*	-1.65964*	-20.0788*	-15.6248*	-13.1337*	I(0)
WCPS	1.46387	0.10665	-2.95077*	-2.44258*	-11.9510*	-6.19941*	I(1)

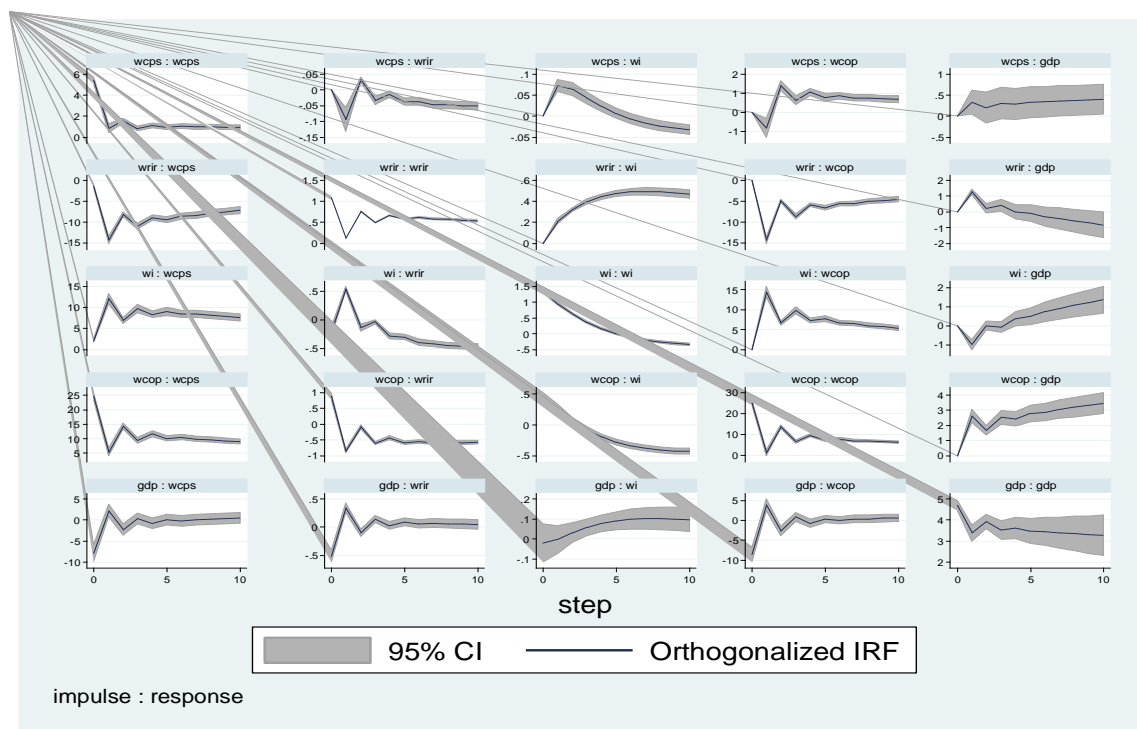
Source: Author's Computation, (2020)

Table 1 presents results of Levin-Lin-Chu (LLC), Im-Pesaran-Shin (IPS) and Breitung test (BT) panel unit root test conducted in the study, both at level and at difference for each of the variables included in the study. Fixed capital formation (FCF); World inflation rate (WI) and world real interest rate (WRIR) are stationary at level while gross domestic product (GDP), world crude oil price (WCOP) and world commodity price index (WCPS) are not stationary at level, but become stationary after first differencing. Thus FCF, WI and WRIR are integrated of order zero i.e.  $I(0)$ , reflecting that these variables on the average do not retain innovative shock passed on them beyond the same period. On the other hand GDP, WCOP, and WCPS are integrated of order 1,  $I(1)$ , reflecting that on the average these variables retained innovative shock passed on them for a short while beyond the same period. Hence variables used in this study are combination of  $I(0)$  and  $I(1)$  variables.

**Objective One:** this section presents result of analyses conducted in the study in the quest to track the impact of world crude oil price shock on gross domestic product of African countries sampled in the study. Result detailed in this section include estimation result of panel vector autoregressive model specified in the study, relating gross domestic product with external shock variables such as world oil price, world inflation rate world real interest rate and world commodity price index. The analysis presented in this section is to examine the response of gross domestic product to innovative shock to world crude oil price. Notably results presented include for all the sampled countries combined and separately for group of oil rich countries and non-rich oil countries. For easy of analysis and in line with empirical best practices among scholars, presentation of result under this section report the impulse response estimation as presented in figures and forecast error decomposition estimation result as represented in tables.

#### 4.2 Impulse Response Analysis

The panel VAR estimation as discussed in the light of impulse response focused on how innovative shock to world oil price impact economic performance of sample Africa countries measured in terms of gross domestic product. This section captures the position for all the sampled Africa countries as presented in figure 1,



**Figure 1: Impulse Response Analysis (World oil price shock and Gross Domestic Products in Africa [GDP])**

Figure 1 showed the response to innovative shock across the endogenous variables included in the VAR system. Notably the focus of objective one is centered on the response of gross domestic product to innovative shock in world crude oil price. As reflected in the last column of figure 1, following innovative shock to world oil price, gross domestic product showed a sharp upward movement from negative zone to the positive zone between the first two periods and the upward trend then continues in a progressive pattern over the intermediate period between period 3 and period 10. Thus the result showed that innovative shock to world oil price has profound positive impact on the gross domestic product of Africa countries sampled in the study.

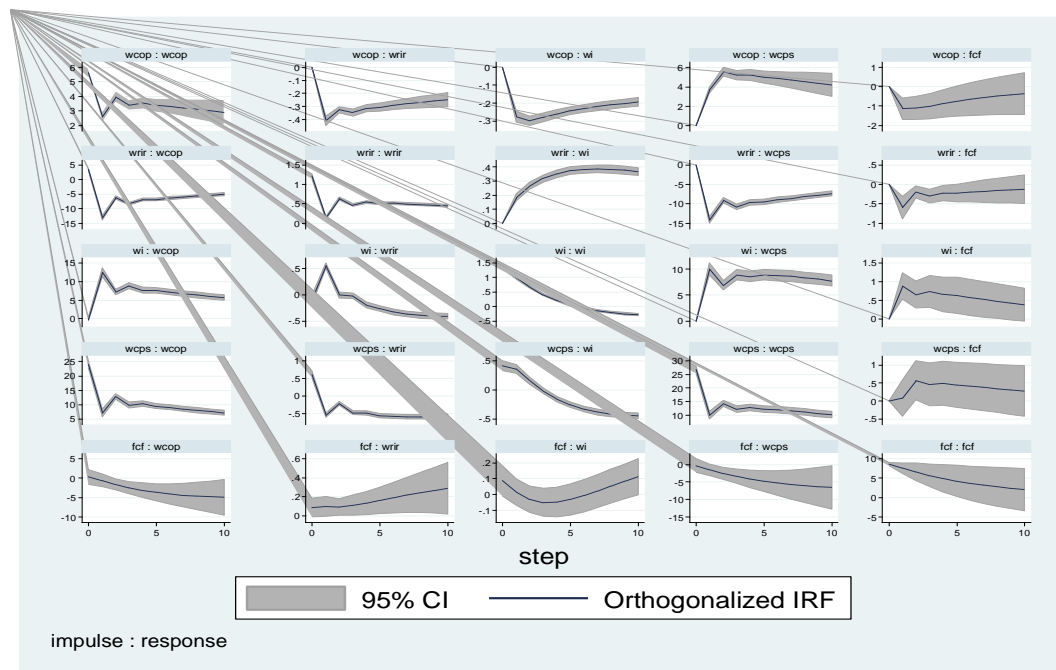
**Objective Two:** *Analysis of the impact of world commodity price shock on fixed capital formation in Africa countries*

This section presents result of analyses conducted in the study in an attempt to investigate the impact of world commodity price index shock on fixed capital formation of African countries. More importantly is the fact that the result is presented for all the sampled countries combined and separately for group of oil rich countries and non- rich oil countries. Impulse response estimations are presented in figures while forecast error variance decomposition estimation results are represented in tables. Other details of the panel VAR estimation result are presented in the Appendix

**Impulse Response Analysis**

**Combined Estimation**





**Figure 2: Impulse Response Analysis (World Commodity Price Shock and Fixed Capital Formation [FCF])**

Figure 3 showed response to innovative shock across the endogenous variables included in the VAR system. Focus for objective two is on the response of fixed capital formation to innovative shock in world commodity price index. As shown in the last column of figure 4, fixed capital formation responded to one standard deviation shock to world commodity price index positively and sharply in the first two periods (period 1 and 2), but in the later between period 3 and period 10 the response declined progressively though still remained in the positive zone over the 10 periods. Observably, also in response to one standard deviation shock in world inflation rate fixed capital formation rose sharply between period 1 and 2, but decline over mildly between period 2 and 10 though within the positive region. On the other in response to one standard deviation shock in both world crude oil price and world real interest rate, fixed capital formation fell sharply between period 1 and 2 and stayed within the negative over time though showing a mild upward movement. In clear terms the result showed that innovative shock to world commodity price index has positive impact on fixed capital formation of African countries sampled in the study but the impact tends to decline over time.

## 5. RESULTS AND DISCUSSIONS

The result shown in figure 1 revealed that response of gross domestic product to innovative shock in world real interest rate is predominantly negative as reflected by the downward trend in the last column of figure 1 for corresponding to world real interest rate (WRIR), on the other gross domestic product responded positively to innovation shock to world inflation rate, while the response is predominantly neutral and mild both over the short and intermediate period for innovative shock to world commodity price index. Results showed that innovative shock to world oil price has profound positive impact on the gross domestic product of Africa countries sampled in the study. The response of gross domestic product to innovative shock to world oil price is somewhat identical for both oil rich and non- oil rich group of Africa countries sampled in the study. Comparing the oil rich African countries with non-oil rich Africa countries it was observed that there is pronounce difference in the response of gross domestic product to external shock only for world commodity price index. While innovative shock to commodity price index influence gross domestic product positively in the oil rich Africa countries, the

impact for non-oil rich Africa countries is negative both in the short and intermediate periods.

The intermediate period world crude oil price among other external shock variable accounted for a substantial contribution to forecast error variance in gross domestic product of Africa countries sampled in the study, though there is no noticeable contribution in the short immediate term. Also in the case of oil rich and non-oil rich Africa countries world crude oil price accounted for a substantial contribution to forecast error variance in gross domestic product however, comparing the non-oil rich African countries with oil rich Africa countries, it was observed that in the intermediate period world oil price accounted for relatively larger percentage of forecast error variance in gross domestic product in non-oil rich Africa countries (67.5%), than oil rich Africa countries (37.9percent)

Again, fixed capital formation responded to one standard deviation shock in world commodity price index positively and sharply in the first two periods (period 1 and 2), but in the later between period 3 and period 10 the response declined progressively though still remained in the positive zone over the 10 periods considered. Result showed that innovative shock to world commodity price index has positive impact on fixed capital formation of African countries sampled in the study but the impact tends to decline over time. Result showed that fixed capital formation of oil rich countries sampled in this study, responded positively to innovative shock in world commodity price index though the response is mild and declining over the short and intermediate period. For non-oil rich African countries shock to world commodity price index has progressive positive effect on fixed capital formation both in the short and intermediate periods. Comparing result for oil rich and non-oil rich Africa countries, it was observe that impact of innovative shock in world commodity price index is more progressive in the case of non-oil Africa countries sampled in the study than the oil rich Africa countries, though the impact is predominantly positive for both groups.

Result showed that both in the short and intermediate period the impact of world commodity price index on fixed capital formation is not pronounced for Africa countries sampled in the study. In the short period world commodity price index only accounted for 0.5% in the intermediate period, while on short period it does not account for percentage in the forecast error variance of fixed capital formation. Result showed that world commodity price index accounted for only 0.2% of the forecast error variance in fixed capital formation of oil rich Africa countries, while for non-oil rich African countries it accounted for about 8.3%, thus further validating that world commodity price index has more pronounce effect on fixed capital formation of non-oil rich Africa countries relative to oil rich Africa countries.

## 6. SUMMARY AND CONCLUSIONS

Premise on the findings, this study concluded that global oil price shock has profound positive impact on the gross domestic product of Africa countries. Notably, the impact is identical for both oil rich and non-oil rich African countries. Secondly, this study established that innovative shock to world commodity price index has positive impact on fixed capital formation of African countries sampled in the study though the impact tends to decline over time. It was also established that impact of innovative shock in world commodity price index on fixed capital formation is more progressive in the case of non-oil rich Africa countries than oil rich Africa countries, though the impact is predominantly positive for both groups. The following recommendations are made: Government of Africa countries both oil rich and non-oil rich should put in place internal system and mechanisms to ensure effective balancing and/or cushioning of external shock impact on their macroeconomic performance especially in terms of aggregate gross domestic product. Oil rich Africa countries should prioritize diversification to prevent over reliance on the global oil price as pedestal for fiscal policy benchmarking. Also, non-oil rich Africa countries should objectively increase their oil reserve and set plan in motion for harnessing their

resource strength, so as to put them on a better vantage position for negotiation and interaction in the global space

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